

What Is Claimed Is:

- sub 8-7
1. A method for detecting and reacting to changes in depth of one or more queues which store messages processed by tasks executing in a computer system, comprising:
- 5 setting a high threshold of a depth of the queue to a first value;
 detecting when the depth of the queue equals or exceeds the high threshold; and
 raising the high threshold by a predetermined increment each time the depth of the queue equals or exceeds the high threshold.
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2. A method according to claim 1, further comprising:
 starting at least one task for processing one or more messages stored in the queue each time the depth of the queue equals or exceeds the high threshold.
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 3. A method according to claim 1, further comprising:
 starting at least one task for processing one or more messages stored in the queue each time the depth of the queue equals or exceeds the high threshold if the number of tasks currently processing the messages in the queue is less than a predetermined amount.
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- sub 8-7 4. A method according to claim 2, further comprising the steps of
 setting a low threshold of the depth of the queue to a value lower than the value of the high threshold; and
 reducing the value of the high threshold if the depth of the queue is equal to or
25 less than the value of the low threshold.
- 30 5. A method for detecting and reacting to changes in depth of one or more queues which store messages processed by tasks executing in a computer system, comprising:
 starting at least one task for processing one or more messages stored in a queue;

setting a high threshold of a depth of the queue to a first value; and
starting at least one additional task for processing the messages in the queue if the
depth of the queue equals or exceeds the high threshold set to the first value.

5 6. A method according to claim 5, further comprising:
 setting the high threshold to a second value greater than the first value if the
 depth of the queue equals or exceeds the high threshold set to the first value.

 7. A method according to claim 6, further comprising:
10 starting at least one additional task for processing the messages in the queue if the
 depth of the queue equals or exceeds the high threshold set to the second value.

 8. A method according to claim 6, further comprising:
 starting at least one additional task for processing the messages in the queue if the
15 depth of the queue equals or exceeds the high threshold set to the second value the
 number of tasks currently processing the messages in the queue is less than a
 predetermined amount.

 9. A method according to claim 5, further comprising:
20 setting a low threshold of the depth of the queue to a second value lower than the
 first value; and
 setting the high threshold to a third value lower than the first value if the depth of
 the queue is equal to or less than the low threshold set to the second value.

25 10. A computer system for detecting and reacting to changes in depth of one
 or more queues which store messages processed by tasks executing in the computer
 system, comprising:

 means for setting a high threshold of a depth of the queue to a first value;
 means for detecting when the depth of the queue equals or exceeds the high
30 threshold; and

means for raising the high threshold by a predetermined increment each time the depth of the queue equals or exceeds the high threshold.

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11. A computer system according to claim 10, further comprising:
5 means for starting at least one task for processing one or more messages stored in the queue each time the depth of the queue equals or exceeds the high threshold.

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12. A computer system according to claim 10, further comprising the step of:
means for starting at least one task for processing one or more messages stored in
10 the queue each time the depth of the queue equals or exceeds the high threshold if the number of tasks currently processing the messages in the queue is less than a predetermined amount.

- 533 13. A computer system according to claim 10, further comprising:
15 means for setting a low threshold of the depth of the queue to a value lower than the value of the high threshold; and
means for reducing the value of the high threshold if the depth of the queue is equal to or less than the value of the low threshold.

- 20 14. A computer program stored on a computer readable medium for detecting and reacting to changes in depth of one or more queues which store messages processed by tasks executing in a computer system, the computer program configured to:
set a high threshold of a depth of the queue to a first value;
detect when the depth of the queue equals or exceeds the high threshold; and
25 raise the high threshold by a predetermined increment each time the depth of the queue equals or exceeds the high threshold.

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15. A computer program according to claim 14, further configured to:
start at least one task for processing one or more messages stored in the queue
30 each time the depth of the queue equals or exceeds the high threshold.

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16. A computer program according to claim 14, further configured to:

start at least one task for processing one or more messages stored in the queue
each time the depth of the queue equals or exceeds the high threshold if the number of
5 tasks currently processing the messages in the queue is less than a predetermined
amount.

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17. A computer program according to claim 14, further configured to:

10 set a low threshold of the depth of the queue to a value lower than the value of
the high threshold; and

~~reduce the value of the high threshold if the depth of the queue is equal to or less than the value of the low threshold.~~

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